PATENT CLAIMS

1. A retrovirus vector that is capable of transducing cells in a G_0 phase, whereby the vector is derived from a SIVsmmPBj14 virus.

2. The retroviral vector according to claim 1, whereby the vector is further capable of transducing cells in a mitotic phase and/or a G_1 phase.

3. The retroviral vector according to claim 1 or 2, whereby part of or the entirety of a SIVsmmPBj14 *env* gene is deleted.

4. The retroviral vector according to claim 3, whereby the deletion of the SIVsmmPBj14 *env* gene is in the SU range.

5. The retroviral vector according to any of claims 1 to 4, whereby the vector is a pseudotype vector.

6. The retroviral vector according to any of claims 1 to 5, comprising a part of or the entirety of an envelope protein of a virus other than the SIVsmmPBj14 virus.

7. The retroviral vector according to claim 6, whereby the virus is selected from HIV-1, SIVagm, SNV, MLV or VSV.

8. The retroviral vector according to claim 6, whereby the envelope protein is the G-protein of VSV.

9. A method for making pseudotype vectors, comprising the steps of:

   a) deleting a part of or the entire *env* gene of a SIVsmmPBj14 virus or a molecular clone thereof; and

b) cotransfecting cells with the construct of a) and an expression construct for an envelope protein, whereby the envelope protein is derived from a virus other than the SIVsmmPBj14 virus.

10. The method according to claim 9, whereby deleting the *env* gene renders the envelope protein nonfunctional.

11. The method according to claim 9 or 10, whereby the cells are 293T cells.

12. The method according to any of claims 9 to 11, whereby the virus is selected from HIV-1, SIVagm, SNV, MLV or VSV.

13. The method according to any of claims 9 to 11, whereby the envelope protein is the G-protein of VSV.

14. A pseudotype vector according to the method of any of claims 9 to 13.

15. Use of a vector according to any of claims 1 to 8 or 14 for transducing cells in the G_0 phase.

16. Use according to claim 15, whereby the mammalian cells are human lymphocytes.

17. Use according to claim 15 or 16, whereby the cells in the G_0 phase are activated or nonactivated.